

# Junos® OS Release 12.1X47 Feature Guide

Junos OS Release 12.1X47-D20

3 March 2015

Revision 1

This feature guide accompanies Junos OS Release 12.1X47-D20. This guide contains detailed information about new or enhanced functionality introduced in Junos OS Release 12.1X47-D20 that is summarized in the Release Notes.

## Contents

New Features in Junos OS Release 12.1X47-D20 .....	2
Management .....	2
TCP/TLS Support for Real-Time Logging .....	2
System Log Messages .....	7
Documentation Feedback .....	7
Requesting Technical Support .....	7
Self-Help Online Tools and Resources .....	8
Opening a Case with JTAC .....	8
Revision History .....	8

## New Features in Junos OS Release 12.1X47-D20

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Junos OS Release 12.1X47-D20 introduces the following features:

- Management on page 2

### **Management**

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- TCP/TLS Support for Real-Time Logging on page 2
- System Log Messages on page 7

#### **TCP/TLS Support for Real-Time Logging**

- log (Security) on page 3
- [edit security log] Hierarchy Level on page 4
- transport (Security Log) on page 6

## log (Security)

Syntax    log {  
    cache {  
        exclude *exclude-name* {  
            destination-address *destination-address*;  
            destination-port *destination-port*;  
            event-id *event-id*;  
            failure;  
            interface-name *interface-name*;  
            policy-name *policy-name*;  
            process *process-name*;  
            protocol *protocol*;  
            source-address *source-address*;  
            source-port *source-port*;  
            success;  
            user-name *user-name*;  
        }  
        limit *value*;  
    }  
    disable;  
    event-rate *rate*;  
    file {  
        files *max-file-number*;  
        name *file-name*;  
        path *binary-log-file-path*;  
        size *maximum-file-size*;  
    }  
    format (binary | sd-syslog | syslog);  
    mode (event | stream);  
    rate-cap *rate-cap-value*;  
    (source-address *source-address* | source-interface *interface-name*);  
    stream *stream-name* {  
        category (all | content-security);  
        format (binary | sd-syslog | syslog | welf);  
        host {  
            *ip-address*;  
            port *port-number*;  
        }  
        severity (alert | critical | debug | emergency | error | info | notice | warning);  
    }  
    traceoptions {  
        file {  
            *filename*;  
            files *number*;  
            match *regular-expression*;  
            size *maximum-file-size*;  
            (world-readable | no-world-readable);  
        }  
        flag *flag*;  
        no-remote-trace;  
    }  
    transport {  
        protocol (udp | tcp | tls);  
    }

```
        tls-profile tls-profile-name;  
        tcp-connections tcp-connections;  
    }  
    utc-time-stamp;  
}
```

**Hierarchy Level** [edit security]

**Release Information** Statement introduced in Junos OS Release 9.2.  
Support for the **source-interface** option added in Junos OS Release 12.1X46-D25.

**Description** You can set the mode of logging (event for traditional system logging or stream for streaming security logs through a revenue port to a server). You can also specify all the other parameters for security logging.

**Options** **disable**—Disable the security logging for the device.  
**event-rate *rate***—Limit the rate (0 through 1500) at which logs will be streamed per second.  
**rate-cap *rate-cap-value***—Limit the rate (0 through 5000) at which data plane logs will be generated per second.  
**source-address *source-address***—Specify a source IP address or IP address used when exporting security logs.  
**source-interface *interface-name***—Specify a source interface name, which is mandatory to configure **stream**.



**NOTE:** The **source-address** and **source-interface** are alternate values.  
Using one of the options is mandatory.

**utc-time-stamp**—Specify to use UTC time for security log timestamps.

The remaining statements are explained separately.

**Required Privilege** security—To view this statement in the configuration.  
**Level** security-control—To add this statement to the configuration.

**Related Documentation**

- *Application Tracking Feature Guide for Security Devices*
- *Master Administrator for Logical Systems Feature Guide for Security Devices*

#### [edit security log] Hierarchy Level

```
security {  
    log {  
        cache {  
            exclude exclude-name {  
                destination-address destination-address;  
                destination-port destination-port;  
                event-id event-id;  
            }  
        }  
    }  
}
```

```

failure;
interface-name interface-name;
policy-name policy-name;
process process-name;
protocol protocol;
source-address source-address;
source-port source-port;
success;
user-name user-name;
}
limit value;
}
disable;
event-rate rate;
file {
  files max-file-number;
  name file-name;
  path binary-log-file-path;
  size maximum-file-size;
}
format (binary | sd-syslog | syslog);
mode (event | stream);
source-address source-address | source-interface interface-name;
stream stream-name {
  category (all | content-security);
  format (binary | sd-syslog | syslog | welf);
  host {
    ip-address;
    port port-number;
  }
  severity (alert | critical | debug | emergency | error | info | notice | warning);
}
traceoptions {
  file {
    file-name;
    files max-file-number;
    match regular-expression;
    (no-world-readable | world-readable);
    size maximum-file-size;
  }
  flag flag;
  no-remote-trace;
}
transport {
  protocol (udp | tcp | tls);
  tls-profile tls-profile-name;
  tcp-connections tcp-connections;
}
utc-time-stamp;
}
}

```

- Related Documentation**
- [Security Configuration Statement Hierarchy](#)
  - [Application Tracking Feature Guide for Security Devices](#)

- *Master Administrator for Logical Systems Feature Guide for Security Devices*

## transport (Security Log)

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**Syntax**    `transport {  
 protocol (udp | tcp | tls);  
 tls-profile tls-profile-name;  
 tcp-connections tcp-connections;  
}`

**Hierarchy Level**    [edit security log]

**Release Information**    Statement introduced in Junos OS Release 12.1X46-D25.

**Description**    Configure security log transport options.

**Options**    **protocol**—Specify the type of transport protocol to be used to log the data.

- **UDP**—Set the transport protocol to UDP.
- **TCP**—Set the transport protocol to TCP.
- **TLS**—Set the transport protocol to TLS.

**tls-profile *tls-profile-name***—Specify the TLS profile name.

**tcp-connections *tcp-connections***—Specify the number of TCP connections per SPU.

**Range:** 1 through 5.

**Default:** 1.

**Required Privilege**    `security`—To view this statement in the configuration.

**Level**    `security-control`—To add this statement to the configuration.

**Related Documentation**    • *Application Tracking Feature Guide for Security Devices*

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## System Log Messages

- RTLOG System Log Messages on page 7

### RTLOG System Log Messages

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#### **RTLOG\_CONN\_OPEN**

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**System Log Message** args stream-name transport-proto source-address source-port destination-address destination-port;

**Description** RTLOG connection was established.

**Type** Event: This message reports an event, not an error

#### **RTLOG\_CONN\_CLOSE**

---

**System Log Message** args stream-name transport-proto source-address source-port destination-address destination-port;

**Description** RTLOG connection was closed.

**Type** Event: This message reports an event, not an error

#### **RTLOG\_CONN\_ERROR**

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**System Log Message** args stream-name error-message;

**Description** RTLOG connection was aborted.

**Type** Event: This message reports an event, not an error

## **Documentation Feedback**

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We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can provide feedback by using either of the following methods:

## **Requesting Technical Support**

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Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or JNASC support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at  
<http://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit  
<http://www.juniper.net/support/warranty/>.

- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

## Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: <http://www.juniper.net/customers/support/>
- Search for known bugs: <http://www2.juniper.net/kb/>
- Find product documentation: <http://www.juniper.net/techpubs/>
- Find solutions and answer questions using our Knowledge Base: <http://kb.juniper.net/>
- Download the latest versions of software and review release notes: <http://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <http://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum: <http://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <http://www.juniper.net/cm/>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://tools.juniper.net/SerialNumberEntitlementSearch/>

## Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at <http://www.juniper.net/cm/>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <http://www.juniper.net/support/requesting-support.html>.

## Revision History

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